

Figure 1

Proinsulin	C-peptide
Ins_Human	EAEDLQVGQVELGOGPGAGSLQPLALEGSLQ (SEQ ID NO. 1)
Ins Pantr (Chimpanzee)	EAEDLQVGQVELGGGPGAGSLQPLALEGSLQ (SEQ ID NO. 9)
Ins_Aotr (Night monkey)	EAEDLQVGQVELGGGSITGSLPPLEGPMQ (SEQ ID NO. 10)
Ins Macpa (Crabeatingmaoaque)	EAEDPQVGQVELCSGGPGAGSLQPLALEJSLQ (SEQ ID NO. 11)
Ins_Cera (Green monkey)	EAEDPQVGQVELGGGPGAGSLQPLALEGSLQ (SEQ ID NO. 12)
Ins Pig	EAENPQAGAVELGGGLGGLQALALEGPPQ (SEQ ID NO. 13)
Ins_Boven	EVEGPQVGALELAGGPGAGGLEGPPQ (SEQ ID NO. 14)
Ins_Horse	EAEDPQVGEVELGGGPGLGGLQPLALAGPQQ (SEQ ID NO. 15)
Ins sheep	EVEGPQVGALELAGGPGAGGLEGPPQ (SEQ ID NO. 16)
Ins Canpa (dog)	EVEDLQVRDVELAGAPGEGGLQPLALEGALQ (SEQ ID NO. 17)
Ins_Rabbit	EVE LQVGQAE LGOGPGAGGLQPSALELALQ (SEQ ID NO. 18)
Ins 1_Rat	EVEDPQYPQLEGGPEAGDLQTLALEVARQ (SEQ ID NO. 19)
Ins2_Rat	EVEDPQVAQLELGGGPGAGDLQTLALEVARQ (SEQ ID NO. 20)
Ins Rodsp (rodent sp)	EVEDPQVGQVELGAGPGAGSEQTLALEVARQ (SEQ ID NO. 21)
Ins mouse	EVEDPQVEQLELGGSPGDLQTLALEVARQ (SEQ ID NO. 22)
Ins2_Mouse	EVEDPQVAQLELGGGPGAGDLQTLALEVAQQ (SEQ ID NO. 23)
Ins Caypo (guinea pig)	ELED PQYEQTELGMGLGAGGLQPLALEMALQ (SEQ ID NO. 24)

Ins_Crib	GYEDPQVAQLELGOGPGADDLQTLALEVAQQ (SEQ ID NO. 25)
Ins_Psaob	GYDDPQMPQLELGGSPGAGDLRALALEVARQ (SEQ ID NO. 26)
Ins_Ocide	ELEDLQVEQAELGLEAGGLQPSALEMILQ (SEQ ID NO. 27)
Q62543 (western wild mouse)	GGPGAGDLQTLALEVAQQ (SEQ ID NO. 28)
Q62542 (western wild mouse)	GSPGDLQTLALEVARQ (SEQ ID NO. 29)
Ins_Anapi (domestic duck)	DVEQPLVNGPLKGEVGELPPQHEEYQXX (SEQ ID NO. 30)
Ins_Chick (chicken)	DVEQPLYSSPLKGEAGYLPPQQEEYEKV (SEQ ID NO. 31)

3/5

Figure 2

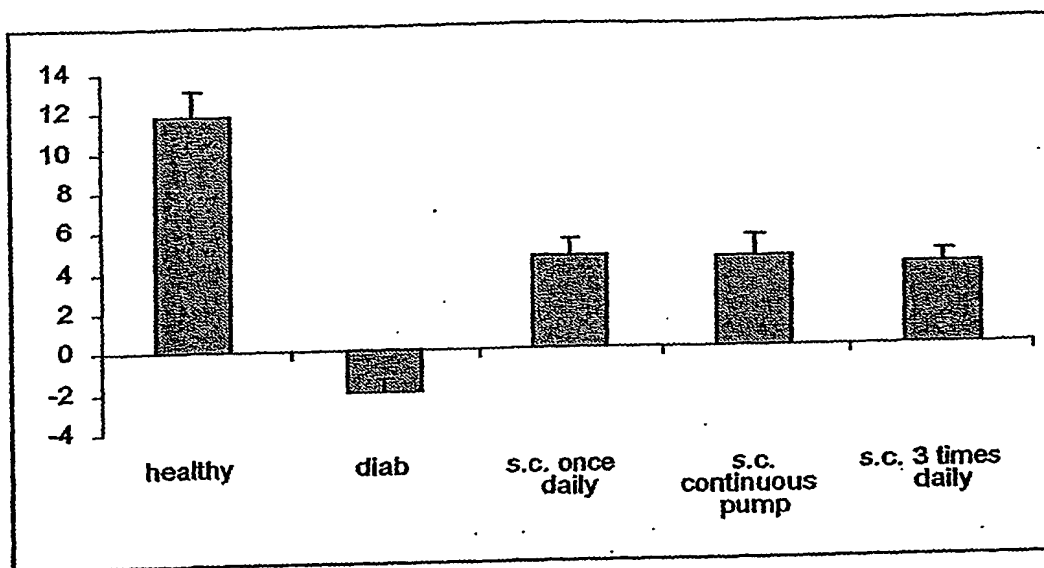
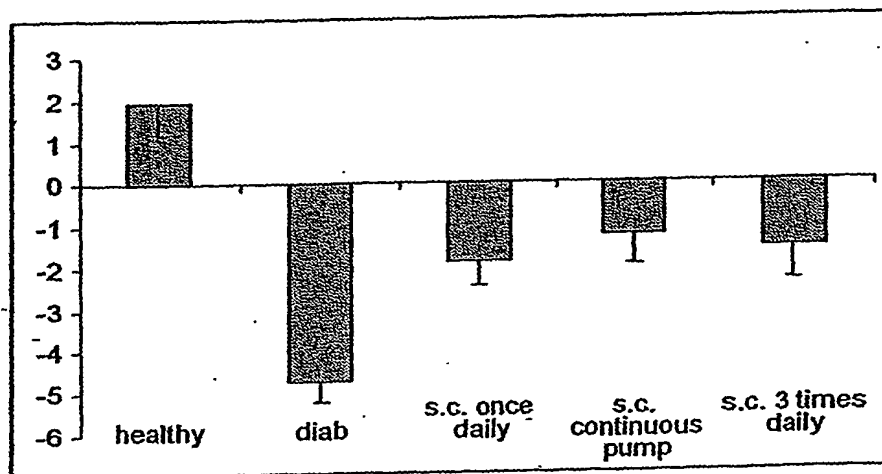
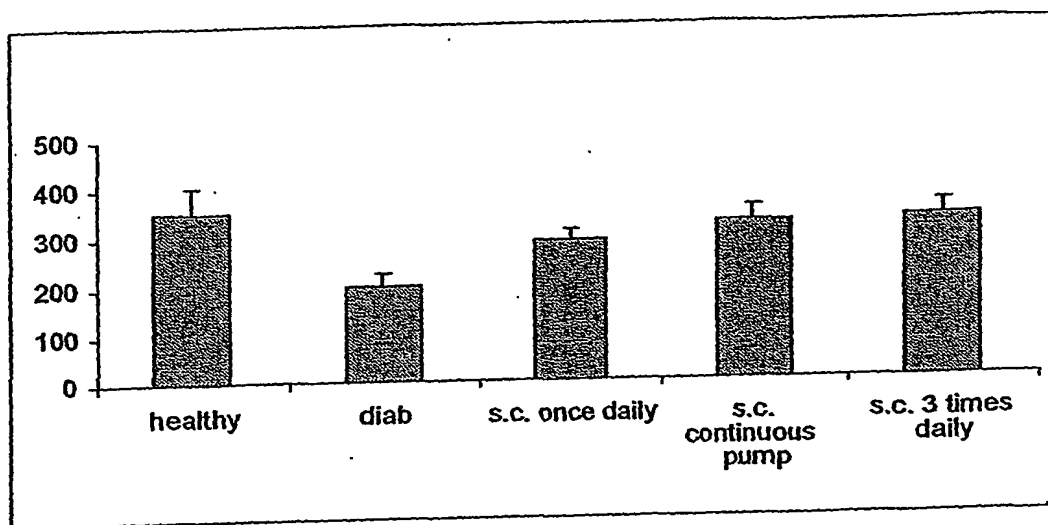


Figure 3



4/5

Figure 4



5/5

Figure 5

Teased fiber assessment of nodal and axonal morphometric changes in healthy controls and diabetic rats receiving C-peptide treatment for 8 weeks with different administration regimens

Frequency of fibers (%) showing	Non-Diabetic Controls	Diabetic untreated	C-peptide Treatment		
			Once Daily	Continuous infusion	Three times daily
Paranodal swelling	1.03 ± 0.16	7.60 ± 0.37	2.49 ± 0.15*	1.53 ± 0.18	1.78 ± 0.16
Paranodal demyelination	0.09 ± 0.08	2.22 ± 0.12	1.01 ± 0.13*	0.24 ± 0.10	0.45 ± 0.16
Excessive wrinkling	0.68 ± 0.07	3.63 ± 0.35	0.57 ± 0.14*	0.55 ± 0.11	0.58 ± 0.10
Axonal degeneration	0.30 ± 0.17	1.84 ± 0.39	0.43 ± 0.16*	0.30 ± 0.10	0.38 ± 0.19

Mean values ± SE are given

* Significantly lower than the corresponding value for untreated diabetic animals, PC 0.01